Pachycladon fasciarium

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Threatened – Nationally Critical | Qualifiers: CD, OL
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

FLOWER COLOURS
Green, White

DETAILED DESCRIPTION
Monocarpic, glabrous, perennial herb, up to 200mm tall; root-stock stout, up to 20mm diameter. Leaves 19–46 × 1.5–4.7mm, narrowly linear to narrowly linear-lanceolate, green; margin usually entire, occasionally with 1–3 pairs of minute teeth up to 0.5mm deep; apex acute to subacute; base attenuate; petiole up to 15mm long. Inflorescence 100–150mm tall, with terminal and lateral racemes. Cauline leaves on lower part of rachis, subtending lateral racemes and occasionally lowest flowers, similar to rosette leaves, 6–25 × 0.5–1.2mm, becoming smaller in distal parts. Racemes 60–100mm long at fruiting, 7–25-flowered. Pedicels 7.0–10.0mm long, suberect to erecto-patent. Sepals 3.1–3.4 × 2.2–2.3mm, green and often flushed pink, broadly elliptic; apex obtuse. Petals 5.5–6.4 × 2.8–3.6mm, white; claw 1.8–2.0mm long; limb broadly elliptic to obovate, 3.3–4.4mm long; apex obtuse; base cuneate to obtuse. Median stamen filaments c. 3.0mm long; lateral stamen filaments c. 2.3mm long, cream, flushed green at base; anthers 1.0–1.2 × 0.6–0.8mm, cream. Ovary c. 3.2mm long, green. Style 0.8–0.9mm long. Stigma 0.5–0.6mm wide. Siliques 25–45 × 1.4–1.6mm, linear, terete, at maturity yellow-brown and often flushed red-brown; septum intact, without a midvein. Seeds 1.2–1.5 mm long, 0.6–0.8mm wide, 0.3–0.4mm thick, oblong to narrowly ellipsoid, flattened, brown or red-brown; hilum basal; surface regular to irregular, reticulate; wing apical, 0.1–0.4mm long.


Pachycladon fasciarium. Photographer: Jan Clayton-Greene, Licence: CC BY-NC.


Pachycladon fasciarium. Photographer: Jan Clayton-Greene, Licence: CC BY-NC.

SIMILAR TAXA
Most similar to P. fastigiatum from which it is distinguished by glabrous, narrowly linear, shorter, usually entire leaves, with a length-to-width ratio of 7.4–18.4:1 (average 11.3:1). If the leaves are toothed these are usually only 0.5mm deep. The leaves of P. fastigiatum are either glabrous or hairy, elliptic to lanceolate, prominently serrated with teeth usually 1.0–5.8mm deep and with a length-to-width ratio of 3.2–8.8:1 (average 5.2:1).

DISTRIBUTION
Endemic. South I. Eastern Marlborough (Chalk Range, Mead Hill and Ben More).

HABITAT
Pachycladon fasciarium is an obligate calcicole, occurring only on Amuri Limestone bluffs and cliffs at an altitudinal range of 900–1170m.

THREATS
Browsing by goats, possums and rabbits poses a threat and for this reason several plants in the Chalk Range have been caged for protection. The small number of plants is also of concern as it is known from less than 50 plants, flowering is irregular and recruitment is likely to be sporadic and at low levels. Previously recorded as Pachycladon aff. fastigiata (CHR 279206; Chalk Range) in de Lange et al., 2004, Threatened and uncommon plants on New Zealand, New Zealand Journal of Botany 42: 45-76.

GENUS
Pachycladon

FAMILY
Brassicaceae

AUTHORITY
Pachycladon fasciarium Heenan

SYNONYMS
None (first described in 2009).

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
November – December

FRUITING
January

PROPAGATION TECHNIQUE
Difficult - should not be removed from the wild

PLANT OF THE MONTH
This plant has been featured as a Plant of the Month – see Trilepidea: NZPCN newsletter for May 2022 for the full story.

PREVIOUS CONSERVATION STATUSES
2017 | Threatened – Nationally Critical | Qualifiers: CD, OL
2012 | Threatened – Nationally Critical | Qualifiers: CD, OL
2009 | Threatened – Nationally Critical | Qualifiers: CD
2004 | Threatened – Nationally Critical
Jump to current conservation status

REFERENCES AND FURTHER READING
Heenan, P. B. 2009b: A new species of Pachycladon (Brassicaceae) from eastern Marlborough, New Zealand. New Zealand Journal of Botany 47: 155–161.

ATTRIBUTION
Description from: Heenan (2009b).

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/pachycladon-fasciarium/

PDF DATE
27 May 2026